UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

APR 2 3 2015

United Technologies Corporation
Attn: David G. Clymer
EH&S Remediation Group
9 Farm Springs Road, MS101
Farmington, Connecticut 06032

Re: PCB Risk-Based Disposal Approval under 40 CFR § 761.61(c)
Andrew Willgoos Turbine Laboratory
East Hartford, Connecticut

Dear Mr. Clymer:

This is written in response to the Notification[1] by United Technologies Corporation ("UTC") for approval of a PCB remedial plan to address PCB-contaminated soil and other building materials at the Pratt & Whitney property located at One Pent Road (the "Site") in East Hartford, Connecticut. The Site contains PCB-contaminated soil and building materials (e.g., concrete) that exceed the allowable PCB level for unrestricted use under the federal PCB regulations at 40 CFR § 761.61(a).

UTC's proposed plan includes the following activities:

- Excavate soil and concrete with PCB concentrations greater than (">") 1 part per million ("ppm") located within four feet below ground surface ("bgs");
- Excavate soil and concrete with PCB concentrations > 10 ppm located greater than four feet bgs;

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[1] Information was submitted by AECOM on behalf of UTC to support the notification requirements under 40 CFR §§ 761.61(a) and (c). Information was provided dated October 2011 (PCB Self-Implementing Cleanup Plan X208 Exhauster Tunnel Complex); November 6, 2012 (Sampling Results – Physical Chemistry Laboratory); May 19, 2014 (Remedial Action Report for Self-Implementing Cleanup (X-208 Exhaust Silencer Tunnel and X-210 Test Stand))); May 2014 (PCB Remedial Plan); September 8, 2014 (NN-RTA01-08 Asphalt Sampling); September 9, 2014 (Sample Results New Oil House Building Material Sampling); October 30, 2014 (email clarification on Physical Chemistry Lab mastic and building demolition status); November 18, 2014 (email clarification on PCB Remedial Plan App. C Building Materials Report); December 4, 2014 (Pre-Verification Sampling for the Planned Shored Excavation in Remediation Target Area NWB-RTA05-09); March 3, 3015 (Response to Comments); and, April 20, 2015 (email revised Tables Ex-01 and 4-02). These submissions will be referred to as the "Notification."

- Dispose of PCB-contaminated soil/concrete with less than ("<") 50 ppm PCB at a state-permitted landfill in accordance with 40 CFR § 761.61(a)(5)(i)(B)(*2*)(*ii*) and PCB-contaminated soil/concrete with greater than or equal to ("≥") 50 ppm in a TSCA-permitted disposal facility or RCRA hazardous waste landfill in accordance with 40 CFR § 761.61(a)(5)(i)(B)(*2*)(*iii*);

- Install a minimum four feet clean soil cap(s) over PCB-contaminated soil and concrete with > 1 ppm but less than or equal to ("≤") 10 ppm; and,

- Record a deed restriction in the form of an environmental land use restriction ("ELUR") to document PCB concentrations at the Site, to establish use restrictions, to require maintenance of the clean cap(s) and to detail necessary actions if future excavation activities are planned.

The information provided meets the notification requirements under 40 CFR §§ 761.61(a)(3) and (c). While UTC is proposing to meet the *high occupancy area* PCB cleanup standard of ≤ 10 ppm under 40 CFR § 761.61(a)(4), UTC has requested a deviation from the Subpart N characterization sampling requirements and/or the Subpart O verification sampling requirements for certain areas due to the size of the Site. UTC also has proposed an alternative to the cap requirements under 40 CFR § 761.61(a)(7). For the alternative cap, UTC is proposing to meet the Connecticut Department of Energy and Environmental Protection ("CTDEEP") requirements.

Given the sampling that has been conducted to-date and the additional sampling that will be conducted during soil excavation, EPA has determined that the PCB-contaminated soil/concrete will be adequately defined for purposes of either off-site disposal or on-site disposal. Based on the proposed reuse of the Site for commercial and/or industrial purposes, EPA finds that the proposed plan will not pose an unreasonable risk of injury to health or the environment once the cap(s) is constructed. The cap(s) will prevent direct exposure to Site contaminants and will be maintained with a long-term inspection and maintenance plan. EPA applies this reasonable risk standard in accordance with the PCB regulations at 40 CFR § 761.61(c), and the Toxic Substances Control Act at 15 USC § 2605(e).

UTC may proceed with its project in accordance with 40 CFR § 761.61(c); its Notification; and, this Approval, subject to the conditions of Attachment 1.

Please be aware that this Risk-Based Disposal Approval is based on an industrial/commercial end use of the Site. This Approval may be revoked, suspended and/or modified as described in Attachment 1, if the EPA determines that implementation of this Approval and/or a change in Site use may present an unreasonable risk of injury to health or the environment. Nothing in this Approval is intended or is to be construed to prejudice any right or remedy concerning PCBs or other federally-regulated contaminants at the Site otherwise available to the EPA under Section 6 of TSCA, 15 U.S.C. 2605, 40 CFR Part 761, or other provisions of federal law.

This Approval does not release UTC or Pratt & Whitney from any applicable requirements of federal, state or local law, including the requirements related to cleanup and disposal of PCBs or other contaminants or requirements for groundwater monitoring under the CTDEEP regulations. Questions and correspondence regarding this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code: OSRR07-2
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1527
Facsimile: (617) 918-0527

EPA shall consider this project complete only when it has received the Final Completion Report and documents evidencing construction of the cap(s) and recording of the deed restriction (i.e., ELUR). Should you have any questions on this matter, please contact Kimberly Tisa at (617) 918-1527.

Sincerely,

Nancy Barmakian

Nancy Barmakian, Acting Director
Office of Site Remediation & Restoration

Attachment 1: Approval Conditions (6 pages)
Attachment 2: Soil Remediation Design Summary (Table 4-01, 5 pages)
Attachment 3: Soil Remediation Design Approval Summary (Table Ex-01, 4 pages)

cc: P. Haskell, AECOM
M. Beeler, AECOM
G. Trombly, CTDEEP
A. Gilbert, EPA RCRA CA
File

ATTACHMENT 1:

PCB RISK-BASED DISPOSAL APPROVAL CONDITIONS
ANDREW WILLGOOS TURBINE LABORATORY (the "Site")
ONE PENT ROAD
EAST HARTFORD, CONNECTICUT

GENERAL CONDITIONS

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the *PCB remediation waste* identified in the Notification[2] and located at the Site.

    a. In the event that United Technology Corporation ("UTC") identifies other PCB-contaminated wastes subject to cleanup and disposal under the PCB regulations, UTC will be required to notify EPA and to clean up the PCB-contaminated wastes in accordance with 40 CFR Part 761.

    b. UTC may submit a separate plan to address the other PCB contaminated wastes or may modify the Notification to incorporate cleanup of the PCBs under this Approval in accordance with Condition 18.

2. UTC shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.

3. In the event that the activities described in the Notification differ from the conditions specified in this Approval, the conditions of this Approval shall govern.

4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.

5. UTC must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during response actions, UTC shall contact EPA within twenty-four (24) hours for direction on sampling and cleanup requirements.

[2] Information was submitted by AECOM on behalf of UTC to support the notification requirements under 40 CFR §§ 761.61(a) and (c). Information was provided dated October 2011 (PCB Self-Implementing Cleanup Plan X208 Exhauster Tunnel Complex); November 6, 2012 (Sampling Results – Physical Chemistry Laboratory); May 19, 2014 (Remedial Action Report for Self-Implementing Cleanup (X-208 Exhaust Silencer Tunnel and X-210 Test Stand))); May 2014 (PCB Remedial Plan); September 8, 2014 (NN-RTA01-08 Asphalt Sampling); September 9, 2014 (Sample Results New Oil House Building Material Sampling); October 30, 2014 (email clarification on Physical Chemistry Lab mastic and building demolition status); November 18, 2014 (email clarification on PCB Remedial Plan App. C Building Materials Report); December 4, 2014 (Pre-Verification Sampling for the Planned Shored Excavation in Remediation Target Area NWB-RTA05-09); March 3, 3015 (Response to Comments); and, April 20, 2015 (email revised Tables Ex-01 and 4-02). These submissions will be referred to as the "Notification."

6. UTC is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time UTC has or receives information indicating that UTC or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.

7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by UTC are authorized to conduct the activities set forth in the Notification. UTC is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.

8. Failure to comply with the Approval conditions specified herein shall constitute a violation of the requirement in 40 CFR § 761.50(a) to store or dispose of PCB waste in accordance with 40 CFR Part 761 Subpart D.

NOTIFICATION AND CERTIFICATION CONDITIONS

9. This Approval may be revoked if the EPA does not receive written notification from UTC of its acceptance of the conditions of this Approval within ten 10 business days of receipt.

DISPOSAL CONDITIONS

10. The cleanup level for *PCB remediation waste* (e.g., soil and concrete) at the Site shall be less than or equal to ("≤") 1 part per million ("ppm") from 0 to 4 feet below ground surface ("bgs") and ≤ 10 ppm at greater than 4 feet bgs. See Attachment 2 for locations with PCB concentrations greater than (">") 1 ppm and where additional PCB removal actions may be required.

    a. Bulk *PCB remediation waste* verification samples (i.e., soil) shall be collected on a bulk basis (i.e., mg/Kg) and in accordance with the frequency detailed in the Notification and summarized in Attachment 3. Samples shall be collected from both excavation bottoms and sidewalls, as applicable.

    b. If applicable, all post-decontamination verification sampling of *porous surfaces* (e.g., concrete) shall be performed on a bulk basis (i.e., mg/Kg). Samples shall be collected according to the EPA Region 1 *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs), Rev. 4, May 5, 2011*, to a maximum depth interval of 0.5 inches (see Attachment 3).

c. Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction and/or analytical method(s) is validated according to Subpart Q.

11. To the maximum extent practical, engineering controls shall be utilized to minimize the potential for PCB releases during the cleanup. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.

12. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with 40 CFR § 761.40; stored in a manner prescribed in 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61, unless otherwise specified below:

a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).

b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).

c. PCB-contaminated water generated during decontamination or dewatering shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.

DEED RESTRICTION AND USE CONDITIONS

13. Within 30 days of completion of the work authorized under this Approval, UTC shall submit for EPA review and approval, a draft deed restriction for the Site. The draft deed restriction may be in the form of an environmental land use restriction ("ELUR") pursuant to the Connecticut Department of Energy and Environmental Protection ("CTDEEP") regulations. Within forty-five (45) days of receipt, EPA shall review and approve the draft deed restriction, approve with minimal conditions, or request specific changes. If EPA requests specific changes, UTC shall submit a revised draft deed restriction for EPA review and approval within thirty (30) days of EPA's request. The deed restriction shall include: a description of the extent and levels of contamination at the property and the PCB remedial actions conducted; a description of the use restrictions for the Site; and the long-term monitoring and maintenance requirements on the Site. The long-term monitoring and maintenance shall include: a description of the activities that will be conducted, including inspection criteria, frequency, and routine maintenance activities; sampling protocols, sampling frequency, and analytical criteria; and reporting requirements to EPA.

14. The Site Owner shall notify the EPA of the sale, lease or grant of any real estate interest in the Site, in writing, no later than sixty (60) days prior to such action. This notification shall include the name, address, and telephone number of the new owner(s). In the event that the Site Owner sells, leases, or grants any real estate interest affecting a portion of the Site, the Site Owner shall continue to be bound by all the terms and conditions of this Approval, unless EPA allocates some or all of this Approval's responsibilities to the new owner(s), lessee or grantee. The notification procedures are as follows:

    a. The new owner(s), lessee or grantee must request, in writing, that the EPA transfer some or all obligations and responsibilities under the Approval to the new owner(s), lessee or grantee;

    b. The EPA reviews the request, and determines whether to allocate some or all of the obligations and responsibilities under the Approval to the new owner(s), lessee, or grantee; and,

    c. The new owner(s), lessee or grantee provides written notification to the EPA of its acceptance of and intention to comply with the terms and conditions of the Approval or new approval, should EPA deem a new approval is necessary. The Approval or new approval may be withdrawn if the EPA does not receive written notification from the new owner(s), lessee or grantee of its acceptance of, and intention to comply with, the terms and conditions of the Approval or new approval within thirty (30) days of its receipt of the Approval or the new approval. Under such circumstances, all terms and conditions of this Approval will continue to be binding on the Site Owner.

15. In the event that the sale, lease or grant of a real estate interest in the Site will involve or result in a change in the use of the Site, EPA may revoke, suspend, and/or modify this Approval or the new approval if it finds, due to the change in use, that this risk-based cleanup and disposal action will not be protective of health or the environment. The new owner or grantee shall record any amendment to the deed restriction, resulting from any approved modification(s), within sixty (60) days of such change(s).

16. In any sale, lease or grant of a real estate interest in the Site, the Site Owner shall retain sufficient access rights to enable it to continue to meet its obligations under this Approval, except as provided above.

INSPECTION, MODIFICATION AND REVOCATION CONDITIONS

17. Any departure from the conditions of this Approval without prior, written authorization from the EPA may result in the revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

18. Any modification(s) in the plan, specifications, and information submitted by UTC, contained in the Notification, and forming the basis upon which this Approval has been issued, must receive prior written approval from the EPA. UTC shall inform the EPA of any modification, in writing, at least 10 days prior to such change. No action may be taken to implement any such modification unless the EPA has approved of the modification, in writing. The EPA may request additional information in order to determine whether to approve the modification.

19. If such modification involves a change in the use of the Site which results in exposures not considered in the Notification, the EPA may revoke, suspend, and/or modify this Approval upon finding that this risk-based disposal action may pose an unreasonable risk of injury to health or the environment due to the change in use. EPA may take similar action if the EPA does not receive requested information needed from UTC to make a determination regarding potential risk.

20. Any misrepresentation or omission of any material fact in the Notification or in any future records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.

21. Approval for these activities may be revoked, modified or otherwise altered: if EPA finds a violation of the conditions of this Approval or of 40 CFR Part 761, including EPA's PCB Spill Cleanup Policy, or other applicable rules and regulations; if EPA finds that these activities pose an unreasonable risk of injury to health or the environment; if EPA finds that there is migration of PCBs from the Site; or if EPA finds that changes are necessary to comply with new rules, standards, or guidance for such approvals. UTC may apply for appropriate modifications in the event new rules, standards, or guidance comes into effect.

22. UTC shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by UTC to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.

RECORDKEEPING AND REPORTING CONDITIONS

23. UTC shall prepare and maintain all records and documents required by 40 CFR Part 761, including, but not limited to, the records required by Subparts J and K. UTC shall maintain a written record of the remedial actions and the analytical sampling for activities conducted under this Approval in one central location. All records shall be made available for inspection by authorized representatives of the EPA, until such time as EPA approves in writing a request for an alternative disposition of such records.

24. UTC shall submit a Final Completion Report ("Report") in both hard copy and electronic format (CD-ROM) to the EPA within 120 days of completion of the activities described under this Approval. At a minimum, this Report shall include: a discussion of the project activities with photo-documentation; characterization and confirmation sampling analytical results with figures showing final conditions; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCBs removed and disposed off-site; copies of manifests and bills of lading or equivalent; and, copies of certificates of disposal or similar certifications issued by the disposer.

25. Within 30 days of EPA's approval of the draft deed restriction required under Condition 13, UTC shall submit a copy of the recorded deed restriction and a certification, signed by a UTC approving official, that it has recorded the deed restriction as required under 40 CFR § 761.61(a)(8)(i)(A).

    a. In the event that the deed restriction is in the form of an ELUR and where CTDEEP approval of the ELUR language is outstanding, within 30 days of receiving approval of the final ELUR language from CTDEEP, UTC shall submit to EPA a certification, signed by a UTC approving official, that it has recorded the deed restriction as required under 40 CFR § 761.61(a)(8)(i)(A). A copy of the recorded ELUR shall also be submitted.

26. Required submittals shall be mailed to:

    Kimberly N. Tisa, PCB Coordinator
    United States Environmental Protection Agency
    5 Post Office Square, Suite 100
    Mail Code: OSRR07-2
    Boston, Massachusetts 02109-3912

27. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self disclosure or penalty policies.

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END OF ATTACHMENT 1

Table 4-01
Soil Remediation Design Summary
Andrew Willgoos Turbine Laboratory
East Hartford Connecticut

RTA ID	RTA Description	Sub RTA	COC	Media Impacted	Proposed Remedy	Excavation Status[1]	Remediation Area (sqft)	Excavation Depth (ft)	Total Volume of Soil (cft)	Total Volume of Soil (cyd)
Central Study Area										
CW-RTA02	Clarke Compressor Area	A	PCBs, ETPH	Soil/Concrete	Excavation	Complete	--	--	--	--
		B	PCBs	Soil/Concrete	Excavation	Complete	--	--	--	--
		C	PCBs	Soil/Concrete	Excavation	Complete	--	--	--	--
CW-RTA05	X-206 Test Stand	ELUR	PCBs, ETPH	Soil	Cap/ELUR	NA	--	--	--	--
CW-RTA08	X-217 Test Stand	CW-RTA08	PCBs	Soil	Excavation	Complete	--	--	--	--
		Area O	PCBs	Soil	Excavation	Planned	11	1	12	0.4
CW-RTA11	X-208 Test Stand	A	PCBs, PAHs	Soil/Concrete	Excavation	Complete	--	--	--	--
	X-209 Test Stand	B	PCBs, PAHs	Soil/Concrete	Excavation	Complete	--	--	--	--
CW-RTA12	X-207 Test Stand	--	PCBs, ETPH, VOCs	Soil	Excavation	Complete*	--	--	--	--
CW-RTA14	X-204 Test Stands	A	PCBs, ETPH, Hg	Soil	Excavation	Complete	--	--	--	--
CW-RTA20	X-203 Test Stands	ELUR	PCBs, ETPH, Hg	--	Cap/ELUR	NA	--	--	--	--
CW-RTA21	X-205 Test Stand	--	PCBs (SPLP), ETPH, Pb	--	Excavation	Partially complete	?	6	?	?
CW-RTA22	X-211 Test Stand	ELUR	PCBs	--	Excavation	Complete	--	--	--	--
CW-RTA39	Shallow PCB Impacts West of Main Laboratory	A1	PCBs	Soil	Excavation	Planned	230	1	242	9
		A2		Soil	Excavation	Planned	870	1	914	34
		E		Soil/Asphalt	Excavation	Planned	1000	1	1050	39
CW-RTA40	Shallow PCB Impacts South of Main Laboratory	F	PCBs	Soil	Excavation	Complete	--	--	--	--
		H		Soil	Excavation	Planned	120	1	126	5
CW-RTA41	Shallow PCB Impacts East of Main Laboratory	C2	PCBs	Soil	Excavation	Planned	350	1	368	14
CW-RTA42	Other PCB-Impacted Building Materials in Willgoos Basements	ELUR	PCBs, ETPH, Metals, PAHs	Soil	Cap/ELUR	NA	205,000	--	--	--
Subtotal	**Central Study Area**									**100**
North Study Area										
NN-RTA01-03	Former North Storage Area West & North swales	A	PCBs	Soil	Excavation	Planned	119	4	513	19
		B	PCBs	Soil	Excavation	Complete	--	--	--	--
		C	PCBs, VOCs	Soil	Excavation	Planned	290	10	3483	129
		D1	PCBs	Soil	Excavation	Partially complete	47	1	49	2
		D2	PCBs	Soil	Excavation	Partially complete	27	4	113	4
		E	PCBs	Soil	Excavation	Complete	--	--	--	--
		F1	PCBs	Soil	Excavation	Partially complete	123	8	1027	38
		F2	PCBs	Soil	Excavation	Partially complete	52	4	217	8
		G1	PCBs	Soil	Excavation	Planned	1040	2	2171	81
		G2	PCBs	Soil	Excavation	Partially complete	397	2	829	31
		G3	PCBs, ETPH	Soil	Excavation	Partially complete	93	4	388	14
		G4	PCBs	Soil	Excavation	Partially complete	22	4	92	3
		G5	PCBs	Soil	Excavation	Planned	174	6	1090	41
		H	PCBs	Soil	Excavation	Complete	--	--	--	--
		I	PCBs	Soil	Excavation	Complete	--	--	--	--
		J1	PCBs, VOCs, ETPH	Soil	Excavation	Planned	221	1	231	9
		J2	PCBs, VOCs, ETPH	Soil	Excavation	Partially complete	109	4	455	17
		K	PCBs	Soil	Excavation	Planned	683	3	2139	80
		L	PCBs	Soil	Excavation	Planned	1846	1	1927	72
		M	PCBs	Soil	Excavation	Planned	272	1	284	11
		ELUR	PCBs	Soil	Cap/ELUR	NA	2740	--	--	--

Attachment 2.

Table 4-01
Soil Remediation Design Summary
Andrew Willgoos Turbine Laboratory
East Hartford Connecticut

North Study Area (cont.)										
NN-RTA04-08	Former North Storage Area East Swale	A1	PCBs, ETPH	Soil	Excavation	Planned	1052	1.5	1647	61
		A2	PCBs, ETPH	Soil	Excavation	Partially complete	270	2	564	21
		B	PCBs	Soil	Excavation	Planned	298	4	1244	46
		C1	PCBs	Soil	Excavation	>50 Complete	225	6	1566	58
		C2	PCBs	Soil	Excavation	>50 Complete	59	10	616	23
		D	PCBs	Soil	Excavation	Complete	--	--	--	--
		E	PCBs	Soil	Excavation	Partially complete	97	4	405	15
		F1	PCBs	Soil	Excavation	Partially complete	100	1.5	157	6
		F2	PCBs	Soil	Excavation	Partially complete	141	4	589	22
		F3	PCBs	Soil	Excavation	Planned	286	1.5	448	17
		G	PCBs	Soil	Excavation	Complete	--	--	--	--
		H	PCBs	Soil	Excavation	Complete	--	--	--	--
		I	PCBs	Soil	Excavation	Complete	--	--	--	--
		J1	PCBs, ETPH	Soil	Excavation	Partially complete	298	4	1244	46
		J2	PCBs	Soil	Excavation	Planned	16	8	134	5
		K1	PCBs, VOCs	Soil	Excavation	Partially complete	589	8	4918	182
		K2	PCBs	Soil	Excavation	Planned	27	12	338	13
		L1	PCBs, EPTH	Soil	Excavation	Planned	1414	2	2952	110
		L2	PCBs	Soil	Excavation	Planned	84	3	263	10
		L3	PCBs	Soil	Excavation	Planned	31	5	189	7
		L4	PCBs	Soil	Excavation	Planned	32	6	216	8
		L5	PCBs	Soil	Excavation	Planned	45	4	188	7
		L6	PCBs	Soil	Excavation	Planned	30	10	351	13
		M	PCBs	Soil	Excavation	Planned	178	4	743	28
		ELUR (1)	PCBs	Soil	Cap/ELUR	NA	4035	--	--	--
		ELUR (2)	PCBs	Soil	Cap/ELUR	NA	183	--	--	--
NN-RTA10-12	Former Interim Hazardous Waste & Drum Storage Areas	A	PCBs, VOCs	Soil	Excavation	Planned	221	2	464	17
		B	PCBs	Soil	Excavation	>50 Complete	226	6	1695	63
		C	PCBs	Soil	Excavation	Planned	234	4	983	36
		D	PCBs	Soil	Excavation	Planned	87	4	365	14
		E	PCBs	Soil	Excavation	Planned	1539	2	3232	120
		F	PCBs	Soil	Excavation	>50 Complete	250	10	3125	116
		ELUR (1)	PCBs	Soil	Cap/ELUR #1	NA	810	--	--	--
		ELUR (2)	PCBs	Soil	Cap/ELUR #2	NA	400	--	--	--
		ELUR (3)	PCBs	Soil	Cap/ELUR #3	NA	400	--	--	--
NN-RTA13-18	Former Gas Compressor House	A	PCBs	Soil	Excavation	Partially complete	30	4	126	5
		B	PCBs	Soil	Excavation	Partially complete	60	6	450	17
		C	PCBs	Soil	Excavation	Complete	--	--	--	--
		D	PCBs	Soil	Excavation	Planned	510	4	2142	79
		E	PCBs	Soil	Excavation	>50 Complete	282	8	2820	104
		F	PCBs	Soil	Excavation	Planned	140	4	588	22
		G	PCBs	Soil	Excavation	Partially complete	280	4	1176	44
		H	PCBs	Soil	Excavation	Planned	60	3	189	7
		I	PCBs	Soil	Excavation	Planned	80	2	168	6
		J	PCBs	Soil	Excavation	Planned	70	4	294	11
		ELUR	PCBs	Soil	Cap/ELUR	NA	1600	--	--	--
Subtotal	**North Study Area**									**1,915**

Attachment 2.

Table 4-01
Soil Remediation Design Summary
Andrew Willgoos Turbine Laboratory
East Hartford Connecticut

Northeast Study Area										
NEB-RTA01 & 11	Former Physical Chemistry Laboratory Building	A	PCBs, PAHs	Soil	Excavation	Planned	240	2	504	19
		B	PCBs	Soil	Excavation	Planned	2350	1.5	3710	137
		C	PCBs	Soil	Excavation	Planned	719	4	3020	112
		D	PCBs	Soil	Excavation	Planned	240	1	252	9
		E	PCBs	Soil	Excavation	Planned	570	2	1197	44
		F	PCBs	Soil	Excavation	Planned	660	3	2079	77
		G	PCBs	Soil	Excavation	Planned	170	1.5	268	10
		H	PCBs	Soil	Excavation	Planned	580	1.5	914	34
		I	PCBs	Soil	Excavation	Planned	153	4	643	24
		J	PCBs	Soil	Excavation	Planned	98	5	564	21
		ELUR	PCBs	Soil	Cap/ELUR	Planned	750	--	--	--
NEB-RTA02	West of Fuel Laboratory	A	PCBs	Soil	Excavation	Planned	80	2	158	6
		B	PCBs	Soil	Excavation	Partially complete	780	4	3276	121
		C	PCBs	Soil	Excavation	Partially complete	40	4	168	6
		D	PCBs	Soil	Excavation	Partially complete	220	4	924	34
NEB-RTA03	Substation 58	A	PCBs	Soil	Excavation	Complete	--	--	--	--
		B	PCBs	Soil	Excavation	Complete	--	--	--	--
		C	PCBs	Soil	Excavation	Complete	--	--	--	--
		ELUR	PCBs	Soil	Cap/ELUR	NA	102	--	--	--
NEB-RTA04	Former Clarke Compressor Air Lines	--	PCBs	Soil	Excavation	Complete	135	2	284	11
		ELUR	PCBs	Soil	Cap/ELUR	NA	959	--	--	--
Subtotals	**Northeast Study Area**									**586**
Northwest Study Area										
NWA-RTA01, 12-15 & 17	Former Equipment Storage Area	A	PCBs	Soil	Excavation	Planned	140	4	588	22
		B	PCBs	Soil	Excavation	Planned	3900	1.5	6143	228
		C	PCBs	Soil	Excavation	Partially complete	80	4	336	12
		D	PCBs	Soil	Excavation	Planned	1520	2	3192	118
		E	PCBs	Soil	Excavation	Planned	1440	1.5	2268	84
		F	PCBs	Soil	Excavation	Planned	170	4	714	26
		G	PCBs	Soil	Excavation	Planned	1080	1.5	1701	63
		H	PCBs	Soil	Excavation	Partially complete	580	2	1218	45
		I	PCBs	Soil	Excavation	Planned	160	4	672	25
		J	PCBs	Soil	Excavation	Planned	1446	2	3037	113
		ELUR (1)	PCBs	Soil	Cap/ELUR	NA	720	--	--	--
		ELUR (2)	PCBs	Soil	Cap/ELUR	NA	170	--	--	--
		ELUR (3)	PCBs	Soil	Cap/ELUR	NA	160	--	--	--
NWA-RTA02	X-234 & X-235 Test Stand Equipment Room	A	PCBs	Soil & Concrete	Excavation	Planned	112	2	235	9
NWA-RTA03	X-232 & X-233 Test Stand Control Room	--	PCBs	Soil	Excavation	Planned	342	4	1436	53
		ELUR	PCBs	Soil	Cap/ELUR	NA	211	--	--	--
NWA-RTA04	Lateral Exhaust Discharge Area	A	PCBs	Soil	Excavation	Planned	310	2	651	24
NWA-RTA05 & 06	Former X-230 & X-231 Test Stand Area	A	PCBs	Soil	Excavation	In Progress	583	3	1836	68
		B	PCBs	Soil	Excavation	Planned	140	1.5	221	8
		C	PCBs	Soil	Excavation	Planned	200	1.5	315	12
		D	PCBs	Soil	Excavation	Planned	50	2	105	4
		E	PCBs	Soil	Excavation	Planned	100	1	105	4
		F	PCBs	Soil	Excavation	Planned	113	1	119	4
		G	PCBs	Soil	Excavation	In Progress	122	3	384	14
		H	PCBs	Soil	Excavation	Planned	1038	4	4360	161
		I	PCBs	Soil	Excavation	Planned	131	1.5	206	8
		J	PCBs	Soil	Excavation	In Progress	48	4	202	7
		ELUR	PCBs	Soil	Cap/ELUR	NA	975	--	--	--

Attachment 2.

Table 4-01
Soil Remediation Design Summary
Andrew Willgoos Turbine Laboratory
East Hartford Connecticut

Northwest Study Area (cont.)											
NWB-RTA02 & 07	Former Welding Shop and Control Room (D.E. Laboratory)	A	PCBs	Soil	Excavation	Planned	1400	0.5	735	27
		B	PCBs	Soil	Excavation	Planned	55	1.5	87	3
		C	PCBs	Soil	Excavation	Planned	840	4	3528	131
		D	PCBs	Soil	Excavation	Planned	170	1.5	268	10
		E	PCBs	Soil	Excavation	Planned	310	2	651	24
		F	PCBs	Soil	Excavation	Planned	160	3	504	19
		G	PCBs	Soil	Excavation	Planned	110	1.5	173	6
		H	PCBs	Soil	Excavation	Planned	1100	0.5	578	21
		I	PCBs	Soil	Excavation	Planned	100	6	630	23
		J	PCBs	Soil	Excavation	Planned	100	3	315	12
		K	PCBs	Soil	Excavation	Planned	100	4	420	16
		L	PCBs	Soil	Excavation	Planned	100	2	210	8
		M	PCBs	Soil	Excavation	Planned	70	0.5	37	1
		ELUR (1)	PCBs	Soil	Cap/ELUR	NA	602	--	--	--
		ELUR (2)	PCBs	Soil	Cap/ELUR	NA	64	--	--	--
NWB-RTA04	X-202 Inlet House	A	PCBs, Hg	Soil	Excavation	Planned	1250	1	1313	49
		B	PCBs	Soil	Excavation	Planned	350	3	1103	41
NWB-RTA05, 06, 08 & 09	40,000 gallon Bunker C Fuel AST	A	PCBs	Soil	Excavation	Planned	105	4	441	16
		B	PCBs	Soil	Excavation	Planned	125	6	938	32
		C	PCBs	Soil	Excavation	Planned	110	3	347	13
		D	PCBs	Soil	Excavation	Planned	110	4	462	17
		E	PCBs & PAHs	Soil	Excavation	Planned	100	2	210	8
		F	PCBs	Soil	Excavation	Planned	175	1	184	7
		G1	PCBs	Soil	Excavation	Planned	130	4	546	20
		G2	PCBs	Soil	Excavation	Planned	50	12	630	23
		H	PCBs	Soil	Excavation	Planned	95	1	100	4
		I1	PCBs	Soil	Excavation	Planned	58	4	244	9
		I2	PCBs	Soil	Excavation	Planned	66	8	554	21
		J	PCBs	Soil	Excavation	Planned	110	1	116	4
		K	PCBs	Soil	Excavation	Planned	250	2	525	19
		L	PCBs & PAHs	Soil	Excavation	Planned	210	6	1458	54
		M1	PCBs	Soil	Excavation	Planned	24	8	216	8
		M2	PCBs	Soil	Excavation	Planned	46	8	432	16
		M3	PCBs	Soil	Excavation	Planned	42	4	189	7
		N	PCBs	Soil	Excavation	Planned	287	24	7236	268
		ELUR (1)	PCBs	Soil	Cap/ELUR	NA	1200	--	--	--
		ELUR (2)	PCBs	Soil	Cap/ELUR	NA	1203	--	--	--
Subtotal	**Northwest Study Area**									**2,043**

Attachment 2.

Table 4-01
Soil Remediation Design Summary
Andrew Willgoos Turbine Laboratory
East Hartford Connecticut

South Study Area										
SS-RTA14-19	Storage Area and Debris Pile	A	PCBs & PAHs	Soil	Excavation	Partially complete	120	4	504	19
		B	PCBs	Soil	Excavation	Planned	440	2	924	34
		C	PCBs	Soil	Excavation	Planned	870	3	2741	102
		D	PCBs & PAHs	Soil	Excavation	Partially complete	630	4	2646	98
		E	PCBs	Soil	Excavation	Planned	1200	2	2520	93
		F	PCBs & PAHs	Soil	Excavation	Planned	120	10	1500	56
		G	PCBs	Soil	Excavation	Planned	150	14	2625	97
		H	PCBs	Soil	Excavation	Planned	290	1.5	457	17
		I	PCBs	Soil	Excavation	Planned	290	1.5	457	17
		J	PCBs	Soil	Excavation	Planned	880	4	3696	137
		K	PCBs	Soil	Excavation	Planned	1050	3	3308	123
		L	PCBs	Soil	Excavation	Planned	310	2	651	24
		M	PCBs	Soil	Excavation	Partially complete	40	3	126	5
		N	PCBs	Soil	Excavation	Partially complete	100	8	1000	37
		O	PCBs	Soil	Excavation	Planned	330	1.5	520	19
		P	PCBs & PAHs	Soil	Excavation	Planned	200	4	840	31
		ELUR (1)	PCBs	Soil	Cap/ELUR #1	NA	4070	--	--	--
		ELUR (2)	PCBs	Soil	Cap/ELUR #2	NA	1760	--	--	--
		ELUR (3)	PCBs	Soil	Cap/ELUR #1	NA	410	--	--	--
		ELUR (4)	PCBs	Soil	Cap/ELUR #2	NA	195	--	--	--
SS-RTA20	Former Fire Hydrant Buildings	A	PCBs	Soil	Excavation	Complete	--	--	--	--
		B	PCBs	Soil	Excavation	Complete	--	--	--	--
Subtotal	**South Study Area**									**908**
Southwest Study Area										
SW-RTA07	North Fuel Dock Pipeline	A	PCBs	Soil	Excavation	Planned	4095	1	4300	159
SW-RTA07B	South Fuel Dock Pipeline	A	PCBs	Soil	Excavation	Planned	660	1	693	26
		B	PCBs	Soil	Excavation	Planned	460	2	966	36
		C	PCBs	Soil	Excavation	Planned	3100	1	3255	121
Subtotal	**Southwest Study Area**									**341**
West Study Area										
WW-RTA06	Main River Pump House	A	PCBs	Soil	Excavation	Planned	350	4	1470	54
WW-RTA07	Surficial Soil Impacts - West Study Area	C	PCBs	Soil	Excavation	Planned	1200	2	2520	93
Subtotal	**West Study Area**									**148**
Total Volume										**5,133**

Notes:

[1] Completed excavations were verified with Subpart O sampling.

* Area completed since submittal of July 2014 Interim Remedial Meaures Report and June 2014 Supplemental Building Materials Investigation, Removal and Disposal Report; to be reported in in final remedial action report.

COC: Contaminant of concern

cft: cubic foot

ft: foot

sqft: square feet

cyd: cubic yard

ELUR: Environmental Land Use Restriction

PCBs: polychlorinated biphenyls

Attachment 2.